

number). The proposal is premised on the reasonable assumption that calls to predetermined emergency numbers are, in general, more likely to be of emergency nature than other calls requesting a voice channel. There are, of course, instances where users make 911 calls for non-emergency matters. In such cases, under the call priority proposal, the 911 call would receive priority over other calls. As the Commission correctly notes, a certain number of non-911 calls are themselves emergency calls and could receive lower priority than the 911 call. The Commission's proposal, however, makes the appropriate policy cut in favor of priority assignment for the 911 category of call.

Motorola further concurs with the Commission's proposal not to interrupt other calls in progress. This is based on the understanding that any call may be an emergency call which must be allowed to continue even if it was not initially accorded priority.

Motorola proposes an alternate timetable for development of the call priority feature. To provide priority channel assignment, prior to deployment in a new software release, significant system-critical software design, development and testing will be required. We believe a reasonable time frame to be no sooner than 2 years following the date of the order.

NS/EP calls: Motorola wishes to draw the Commission's attention to an issue which arose during discussions held by the two Joint Expert Meetings on Wireless Support of 911 and E911 Emergency Services. During disasters, as is not surprising, a large percentage of calls placed are for 911 emergency services. In fact, a significant number of these calls are placed or received by National Security / Emergency Preparedness (NS/EP) personnel. The effective response of these NS/EP teams could actually be undercut, not enhanced, if these latter individuals' call were blocked by a large number of 911 calls placed simultaneously by mobile users who automatically received priority placement into the network. This is a highly relevant issue in the mobile environment. Mobile users have an excellent reputation for providing calls which alert public safety agencies to emergency situations. In fact, these users' response rate may be so heavy as to momentarily overwhelm the lines to PSAPs.

A relative priority scheme needs to be devised, whereby there are perhaps several levels of priority above mobile users' 911 emergency call priority. This would enable NS/EP response personnel to receive their own priority access during disasters and thus to provide the assistance needed. Moreover, there could well be other deserving categories for priority assignment besides NS/EP teams. The relative priority assignment issue needs to be address systematically by public safety entities, mobile service providers, and wireless equipment manufacturers.

V(E). SYSTEM ACCESS TIME

Although the Commission did not address system access time in the NPRM, Motorola wishes to highlight another technological challenge which could have a bearing on E-911 calls made from mobile units. This issue is directly related to the unique environment involving multiple mobile systems: cellular systems operating in the 800 MHz band, PCS systems operating in the 1.8 GHz band, and dual band services which encompass multiple bands by means of dual mode subscriber handsets. The broad issue is the mobile system infrastructure's system scan and selection capabilities as well as the impact on the time required to access these multiple systems to make a 911 call.

Many PCS providers will soon be in the process of building patchwork BTA- and MTA-based networks. PCS systems may employ TDMA, CDMA and other access methodologies. The user's handset must first ascertain the type of service which is available within a particular market, even before the call itself can be placed. This scanning and selection process is a formidable technical challenge if it is to be completed in an acceptably short period of time which is transparent to the user and which avoids delays for emergency calls.

The system access challenge may be even greater in the case of calls placed from roamer mobiles. These calls are typically routed via software programming to carriers in a pre-selected order. For example, a roamer call

will automatically go to carrier "A" unless a channel is not quickly made available, in which case the call is then defaulted to carrier "B," and so on. When an emergency situation occurs, the first carrier in the specified sequence may find that it is always the carrier required to transport these calls. This is hardly an equitable sharing of the air time load. An alternate approach may be feasible in the future, but much system development effort will be required.

VI. EQUIPMENT AUTHORIZATION REQUIREMENTS AND LABELING.

The NPRM solicits comments on whether "it may be necessary to establish specific requirements for base and mobile transmitters to ensure compliance . . . requiring the submittal of information demonstrating compliance as part of the equipment authorization process. (paragraph 55, NPRM)

Motorola opposes this proposal and suggest that it may prove to be unrelated to the actual process of implementation of mobile 911. First, it is simply impossible at this point to predict what specific requirements for base and mobile transmitters would be appropriate. Different systems may use different radio technologies to provide location information. The roaming wireless user may access a multiplicity of different infrastructures in making an emergency call. Secondly, overlay systems may be able to provide location information without requiring changes to the subscriber unit or the base station, or to either system element. Since 911 location capability is a system issue, type acceptance of an individual system element is not likely to be effective in assuring compliance with the proposed rules.

The NPRM further requests comment on the appropriateness of cut-off dates for manufacture, importation and marketing of equipment, as well as for transitions to complying equipment. Motorola strongly urges that any such cut-off dates be tied, not to the effective date of rules adopted within this proceeding but instead to the standards development process which the industry must complete before 911 access can be defined and implemented.

The NPRM requests comment as to whether to require compliant equipment to be labeled with a statement concerning use of the handset to make a 911 call. Motorola suggests that the proposed labeling requirement is less than helpful. The proposed language may become obsolete as location capabilities evolve. The wording itself is so lengthy that it may not be readable on mobile handsets, many of which are becoming smaller and smaller. The label would certainly be ineffective, for example, on a user device which was not a traditional flip phone but instead was mounted on a user's wrist and was the size of a watch.

Labeling requirements suffer from an additional limitation. As the NPRM has correctly noted, 911 services vary from locale to locale. In some areas, enhanced 911 service is not yet fully implemented. Many different labels would have to be printed and attached to mobile units, depending on which State or locale the product was being shipped, and these mobile units would be predictably used in many locations beyond their original purchase point. It would be impractical to devise a universal label which would apply accurately to all 911 systems across the nation.

The labeling proposal highlights the need for education of the user as to how to make 911 calls. This need is important, but labeling may not be the effective vehicle for communication and should not be mandated. For example, other communications media may be far more educational tools, such as public service announcements or student education programs in school. Moreover, these educational tools are not static and may evolve over time, to be addressed on an ongoing basis. This has historically been the case, for example, concerning safety communications over cellular telephones. Cellular users have an excellent reputation for using their handsets responsibly to provide more traffic alerts and other safety information than was ever provided before. The mobile communications industry does far more by way of communication with users than simply relying on a product label. No mandate from the Commission was necessary to facilitate this ongoing communication process between the user public and the cellular service and equipment suppliers. It is neither necessary nor appropriate to impose labeling requirements to address the 911 issue.

CONCLUSION

Motorola supports the Commission's proposal leading toward the implementation of compatibility requirements for enhanced 911 service within the evolving network of wireless mobile communications. The category of real-time voice communications over commercial mobile radio services is appropriate. Big Leo Mobile Satellite Service and local SMRs should be excluded, as are paging and private systems under the Commission's proposal.

Motorola proposes that a "location subsystem interface" standard be developed within the industry, as an alternative to the selection of certain location capabilities under the NPRM's proposal. This interface would allow an interface into the developing wireless intelligent network. Operators could then use an overlay subsystem or integrate within their existing infrastructure.

The three stage proposal should be modified to go directly from the first stage into the ultimate implementation phase. The proposed second stage is not helpful and may be a costly diversion in technology. The many technical challenges of 911 access can be more directly addressed if this approach is adopted.

Timetables for implementation should be keyed to the industry's standards development process.

CERTIFICATE OF SERVICE

I, Alice M. Lee, of Motorola Inc., do hereby certify that on this 9th day of December, 1995 a copy of the foregoing "Comments" was sent to each of the following by first-class mail, postage-prepaid except where service by hand is indicated(*):



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